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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,509	12/03/1999	ANTHONY BEVERINA	8594-001-64	2741

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Supervisor Patent Prosecution
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EXAMINER

PHAN, THAI Q

ART UNIT PAPER NUMBER

2128

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/453,509

Applicant(s)

BEVERINA ET AL.

Examiner

Thai Q. Phan

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,44 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12,44 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/15/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to applicants' amendment filed on 12/15/2005.

Claims 1-12, 44, and 47 are pending in the Action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 12/15/2005 is being considered by the examiner.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12, 44 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergman et al, US patent no. 6,442,694.

As per claim 1, Bergman anticipates a method and apparatus (system) for modeling and isolating faults in a communication network with feature limitations very identical to the claimed invention. According to Bergman, the system (apparatus) includes

Hardware requirements such as a system memory, an input device, a display device, system processor coupled between them for processing input data,

Means for inputting information about a site of potential attacks (terrorize or local attacks) (cols. 14-24),

Means for constructing a model of the location or site based on input from the user (col. 18, line 18 to col. 19, line 8, for example),

Accepting information from the threat and determining an accessibility of the site to the threat of attack (col. 6, lines 44-47, cols. 18-20),

Determining a probability of attack or fault detection for the local attack or at the delivery point due to fault propagation, data stream flow, signal crossing or jamming at network nodes or paths, fatigue components, applications, network flows, capability, etc, based in part on a trigger event and fault propagation (cols. 10-12, col. 18, line 34 to col. 19, line 9, col. 23, lines 10-22, for example), and

Calculating a risk based on the accessibility and probability of failure occurrence or fault detection as claimed (col. 6, lines 44-47, col. 11, lines 35-39, col. 18, lines 20-25, for example).

As per claim 2, Bergman anticipates the Bayesian analysis techniques can be used to calculate consequence and taken actions as claimed (col. 7, lines 1-62, for example).

As per claim 3, Bergman anticipates action models and various consequences in the analysis.

As per claims 4-6, Bergman anticipates the claimed limitations for attack detection and faults propagation like threat vector as claimed.

As per claim 7, Bergman anticipates a method and apparatus (system) for modeling and isolating faults in a communication network with feature limitations very identical to the claimed invention. According to Bergman, the method includes steps and means:

Hardware requirements such as a system memory, an input device, a display device, system processor coupled between them for processing input data,

Means for inputting information about a site of potential attacks (terrorize or local attacks) (cols. 14-24),

Means for constructing a model of the location or site based on input from the user (col. 18, line 18 to col. 19, line 8, for example),

Accepting information from the threat and determining an accessibility of the site to the threat of attack (cols. 18-20),

Determining a probability of attack or fault detection at the local attack or at the delivery point due to fault propagation, data stream flow, signal crossing or jamming at network nodes or paths, fatigue components, applications, network flows, capability, etc, based in part on a trigger event and fault propagation (cols. 10-12, col. 18, line 34 to col. 19, line 9, col. 23, lines 10-22, for example), and

Calculating a risk based on the accessibility and probability of failure occurrence or fault detection as claimed (col. 6, lines 44-47, col. 11, lines 35-39, col. 18, lines 20-25, for example).

As per claims 8-12, due to the similarity of claims 8-12 to claims 2-6 above, claims 8-12 are also rejected in like manner.

As per claims 44 and 47, Bergman anticipates attack events and fault occurrences with historical data or causality for attack analysis (cols. 6-8).

Response to Arguments

3. Applicant's arguments filed 12/15/2005 have been fully considered but they are not persuasive.

In response to applicants' argument Bergman does not disclose predicting attack on the computer network in the future, the examiner disagrees with. Bergman discloses a step of detection a fault occurrence or successfully detecting an attack or the most likely fault set (col. 6, line 45-57, col. 18, line 34 to col. 19, line 9, col. 23, lines 10-22, for example).

In response to applicants' argument Bergman fails to disclose a probability of attack in the network, the examiner disagrees with. Bergman discloses step and means for calculating a risk based on the accessibility and probability of failure occurrence or fault detection as claimed (col. 6, lines 44-47, col. 11, lines 35-39, col. 18, lines 20-25, for example).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 6,088,804, issued to Hill et al, on July 2000

2. US patent no. 6,408,404, issued to Ladwig, M., on June 2002

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

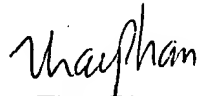
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Feb. 24, 2006


Thai Phan
Patent Examiner